

LISTING OF CLAIMS

The listing of claims below replaces all prior versions and listings of claims in the present application.

1. (Currently Amended) A computer-readable medium comprising:
a command definition, wherein
said command definition comprises commands for interfacing with a multi-channel, multi-media, communication queuing system, and
said commands are independent of ~~a media type of a~~ first and second media types of first and second communication channel channels, respectively, of the multi-channel, multi-media, communication queuing system, wherein the first and second media types are different from each other;
and
instructions to use at least one of the commands of the command definition to support communication via the first and second communication channel channels of the multi-channel, multi-media, communication queuing system.
2. (Previously Presented) The computer-readable medium of claim 1, wherein the command definition includes at least one of the following channel driver commands to: request media type lists and command event lists, create driver objects, request service objects, and release driver objects.
3. (Previously Presented) The computer-readable medium of claim 1, wherein the command definition includes at least one of the following service object commands to: release service objects, issue a notice when handling of an event is complete, invoke commands, release work items, suspend work items, resume work items, handle queued events, and cancel queued events.
4. (Previously Presented) The computer-readable medium of claim 1, wherein the command definition includes at least one of the following client object commands to: start a work item, release work items, save work item contexts, restore work item contexts, serialize work items, free work item storage, begin batch processing, and end batch processing.

5. (Currently Amended) A method of inter-module communication comprising:
communicating ~~via~~ between a first channel driver and a multi-channel, multi-media,
communication queuing system using a command definition,
communicating between a second channel driver and the multi-channel, multi-media,
communication queuing system using the command definition, wherein
said command definition comprises commands for interfacing with the multi-
channel, multi-media, communication queuing system, and
said commands are independent of ~~a media type of a~~ first and second media types
of first and second communication channel channels, respectively,
wherein the first and second media types are different from each other of
~~the multi-channel, multi-media, communication queuing system.~~

6. (Currently Amended) The method of claim 5 wherein the commands for
interfacing comprise commands for ~~further comprising using at least one of the following~~
~~channel driver commands for:~~ requesting media type lists and command event lists, creating
driver objects, requesting service objects, and releasing driver objects.

7. (Currently Amended) The method of claim 5 wherein the commands for
interfacing comprise commands for ~~further comprising using at least one of the following service~~
~~object commands for:~~ releasing service objects, issuing a notice when handling of an event is
complete, invoking commands, releasing work items, suspending work items, resuming work
items, handling queued events, and cancelling queued events.

8. (Currently Amended) The method of claim 5 wherein the commands for
interfacing comprise commands for ~~further comprising using at least one of the following client~~
~~object commands for:~~ starting a work item, releasing work items, saving work item contexts,
restoring work item contexts, serializing work items, freeing work item storage, beginning batch
processing, and ending batch processing.

9. (Original) A computer readable storage media comprising:
computer instructions to implement the method of claim 5.

10. (Original) A signal in a carrier medium comprising:
computer instructions to implement the method of claim 5.
11. (Currently Amended) A communication server comprising:
first instructions configured to support communication via a first communication channel, wherein the first communication channel communicates via a first type of a plurality of types of communication media,
second instructions configured to support communication via a second communication channel, wherein the second communication channel communicates via a second type of communication media, and wherein the first and second types of communication media are different;
the first and second instructions conform to an interface command definition comprising commands for interfacing with ~~one or more~~ first and second communication channel drivers for the ~~plurality of types of~~ first and second communication media, respectively and
~~the commands are independent of the type of the communication media of the communication channel.~~
12. (Previously Presented) The communication server of claim 11, wherein the command definition includes a command to start a work item.
13. (Previously Presented) The communication server of claim 11, wherein the command definition includes a command to release a work item.
14. (Previously Presented) The communication server of claim 11, wherein the command definition includes a command to save a work item context.
15. (Previously Presented) The communication server of claim 11, wherein the command definition includes a command to restore a work item context.
16. (Previously Presented) The communication server of claim 11, wherein the command definition includes a command to serialize a work item.

17. (Previously Presented) The communication server of claim 11, wherein the command definition includes a command to free work item storage.
18. (Previously Presented) The communication server of claim 11, wherein the command definition includes a command to begin batch processing.
19. (Previously Presented) The communication server of claim 11, wherein the command definition includes a command to end batch processing.
20. (Currently Amended) The communication server of claim 11, further comprising: a client object operable to interface with the ~~one or more~~ first and second communication channel drivers using at least a portion of the command definition.
21. (Currently Amended) The communication server of claim 11, further comprising: ~~a plurality of~~ first and second client objects, wherein ~~each~~ the first and second client object ~~interfaees~~ interface with a first and second service object ~~in one of the objects, respectively, in the first and second communication channel drivers, respectively,~~ wherein each ~~service object~~ of the first and second service objects and each ~~client object~~ of the first and second client objects correspond to one type of communication media.
22. (Previously Presented) A channel driver comprising:
instructions configured to receive a command that conforms to an interface command definition comprising commands for interfacing with a multi-channel, multi-media, communication queuing system, wherein
the commands are independent of a media type of a communication channel of
the multi-channel, multi-media, communication queuing system;
and
instructions configured to issue the commands to the communication channel.
23. (Previously Presented) The channel driver of claim 22, wherein the command definition includes a command to request a media type list.

24. (Previously Presented) The channel driver of claim 22, wherein the command definition includes a command to request a command event list.

25. (Previously Presented) The channel driver of claim 22, wherein the command definition includes a command to create a driver object.

26. (Previously Presented) The channel driver of claim 22, wherein the command definition includes a command to request a service object.

27. (Previously Presented) The channel driver object of claim 22, wherein the command definition includes a command to release a driver object.

28. (Previously Presented) The channel driver of claim 22, wherein the command definition includes a command to issue a notice when handling of an event is complete.

29. (Previously Presented) The channel driver of claim 22, wherein the command definition includes a command to invoke commands.

30. (Previously Presented) The channel driver of claim 22, wherein the command definition includes a command to suspend work items.

31. (Previously Presented) The channel driver of claim 22, wherein the command definition includes a command to resume work items.

32. (Previously Presented) The channel driver of claim 22, wherein the command definition includes a command to handle queued events.

33. (Previously Presented) The channel driver of claim 22, wherein the command definition includes a command to cancel queued events.

34. (Previously Presented) The channel driver of claim 22, wherein the channel driver is operable to interface with a communication server and at least one communication device.

35. (Previously Presented) The channel driver of claim 34, further wherein the communication server is operable to interface with a queuing system.

36. (Previously Presented) The channel driver of claim 22, wherein the channel driver is operable to instantiate at least one driver object, wherein the at least one driver object is operable to interface with communication devices for different types of media.

37. (Previously Presented) The channel driver of claim 36, wherein the at least one driver object is operable to instantiate a service object.

38. (Previously Presented) The channel driver of claim 37, further wherein each service object includes a task thread to listen for incoming events from a communication device.

39. (Previously Presented) The channel driver of claim 37, wherein the service object is operable to interface with a communication server, and further wherein the communication server is operable to interface with a queuing system.

40. (Previously Presented) The channel driver of claim 39, wherein the queuing system is operable to assign work items to agents.

41. (Previously Presented) The channel driver of claim 22, wherein the commands in the interface command definition are implemented in a data link library.

42. (Previously Presented) The channel driver of claim 41, wherein commands in the interface command definition are accessed with a function pointer to the data link library.

43. (Previously Presented) The channel driver of claim 22, further comprising a task thread operable to listen for incoming events.

44. (Previously Presented) The channel driver of claim 43, wherein the task thread is operable to invoke an event handling function when an event is detected.

45. (Currently Amended) ~~A method of inter-module communication between at least one channel driver and a communication server, wherein the channel driver is operable to~~

~~interface with one or more communication devices, and further wherein two or more of the communication devices can use different media types, the method comprising:~~

communicating between a first channel driver and a communication server, wherein the first channel driver is operable to interface with a first communication device using a first media type;

communicating between a second channel driver and the communication server, wherein the second channel driver is operable to interface with a second communication device using a second media type, and wherein the first and second media types are different from each other;

using a command definition to support communication between the ~~at least one~~ first channel driver and the communication server and between the second channel driver and the communication server, wherein said command definition comprises commands for interfacing the ~~at least one~~ first and second channel drivers ~~channel driver~~ with the communication server, and said commands are independent of ~~a media type of a communication device using the channel driver~~ the first and second media types.

46. (Previously Presented) The method of claim 45, further comprising: invoking a command to request a media type list.

47. (Previously Presented) The method of claim 45, further comprising: invoking a command to request a command event list.

48. (Previously Presented) The method of claim 45, further comprising: invoking a command to create a driver object.

49. (Previously Presented) The method of claim 45, further comprising: invoking a command to request a service object.

50. (Previously Presented) The method of claim 45, further comprising:
invoking a command to release a driver object.
51. (Previously Presented) The method of claim 45, further comprising:
invoking a command to issue a notice when handling of an event is complete.
52. (Previously Presented) The method of claim 45, further comprising:
invoking a command to suspend a work item.
53. (Previously Presented) The method of claim 45, further comprising:
invoking a command to resume a work item.
54. (Previously Presented) The method of claim 45, further comprising:
invoking a command to handle a queued event.
55. (Previously Presented) The method of claim 45, further comprising:
invoking a command to cancel a queued event.
56. (Previously Presented) The method of claim 45, further comprising:
interfacing the communication server with a queuing system.
57. (Currently Amended) The method of claim 45, further comprising:
detecting incoming events from the first or second communication devices.
58. (Currently Amended) The method of claim 45, further comprising:
instantiating a task thread to detect incoming events from the first or second
communication devices.
59. (Currently Amended) The method of claim 45, further comprising:
detecting an incoming event from one of the first or second communication devices;
and
invoking a function to handle the event.

60. (Previously Presented) The method of claim 59, further comprising:
queuing the event to a memory cache.

61. (Previously Presented) The method of claim 60, further comprising:
indicating the arrival of the event.

62. (Previously Presented) The method of claim 61, further comprising:
dequeuing the event out of the memory cache and processing the event.

63. (Previously Presented) A computer readable storage media comprising:
computer instructions to implement the method of claim 45.

64. (Previously Presented) A signal in a carrier medium comprising:
computer instructions to implement the method of claim 45.

65. (Cancelled)

66. (Cancelled)

67. (Cancelled)

68. (Cancelled)

69. (Currently Amended) ~~An apparatus for inter-module communication between at least one channel driver and a communication server, wherein each channel driver is operable to interface with one or more communication devices, and further wherein two or more of the communication devices can use different media types, the apparatus comprising:~~

first means to facilitate communication between a first channel driver and a

communication server, wherein the first means is configured to communicate with a first communication device using a first media type;

second means to facilitate communication between a second channel driver and the

communication server, wherein the second means is configured to communicate with a second communication device using a second media type, wherein the first and second media types are different from each other;

means for using a command definition, wherein

said command definition comprises commands configured for interfacing the at
~~least one channel driver~~ first and second channel drivers with the
communication server, and

said commands are independent of ~~a media type of one device~~ media types of the
first and second communication devices ~~using a particular channel driver~~
~~of the at least one channel driver~~; and

~~means for issuing a command of the commands of the command definition to the one~~
~~device.~~

70. (Previously Presented) The apparatus of claim 69, further comprising:
means for invoking a command to request a media type list.

71. (Previously Presented) The apparatus of claim 69, further comprising:
means for invoking a command to request a command event list.

72. (Previously Presented) The apparatus of claim 69, further comprising:
means for invoking a command to create a driver object.

73. (Previously Presented) The apparatus of claim 69, further comprising:
means for invoking a command to request a service object.

74. (Previously Presented) The apparatus of claim 69, further comprising:
means for invoking a command to release a driver object.

75. (Previously Presented) The apparatus of claim 69, further comprising:
means for invoking a command to issue a notice when handling of an event is complete.

76. (Previously Presented) The apparatus of claim 69, further comprising:
means for invoking a command to suspend a work item.

77. (Previously Presented) The apparatus of claim 69, further comprising:
means for invoking a command to resume a work item.

78. (Previously Presented) The apparatus of claim 69, further comprising:
means for invoking a command to handle a queued event.
79. (Previously Presented) The apparatus of claim 69, further comprising:
means for invoking a command to cancel a queued event.
80. (Previously Presented) The apparatus of claim 69, further comprising:
means for interfacing the communication server with a queuing system.
81. (Currently Amended) The apparatus of claim 69, further comprising:
means for detecting incoming events from the first or second communication devices.
82. (Currently Amended) The apparatus of claim 69, further comprising:
means for instantiating a task thread to detect incoming events from the first or second
communication devices.
83. (Currently Amended) The apparatus of claim 69, further comprising:
means for detecting an incoming event from one of the first or second communication
devices; and
means for invoking a function to handle the event.
84. (Previously Presented) The apparatus of claim 83, further comprising:
means for queuing the event to a memory cache.
85. (Previously Presented) The apparatus of claim 84, further comprising:
means for indicating the arrival of the event.
86. (Previously Presented) The apparatus of claim 85, further comprising:
means for dequeuing the event out of the memory cache and processing the event.
87. (Previously Presented) The method of claim 5, further comprising:
invoking a command to request a media type list.

88. (Previously Presented) The method of claim 5, further comprising:
invoking a command to request a command event list.
89. (Previously Presented) The method of claim 5, further comprising:
invoking a command to create a driver object.
90. (Previously Presented) The method of claim 5, further comprising:
invoking a command to request a service object.
91. (Previously Presented) The method of claim 5, further comprising:
invoking a command to release a driver object.
92. (Previously Presented) The method of claim 5, further comprising:
invoking a command to issue a notice when handling of an event is complete.
93. (Previously Presented) The method of claim 5, further comprising:
invoking a command to suspend a work item.
94. (Previously Presented) The method of claim 5, further comprising:
invoking a command to resume a work item.
95. (Previously Presented) The method of claim 5, further comprising:
invoking a command to handle a queued event.
96. (Previously Presented) The method of claim 5, further comprising:
invoking a command to cancel a queued event.
97. (Previously Presented) The method of claim 5, further comprising:
interfacing a communication server with a queuing system.

98. (Previously Presented) The method of claim 5, further comprising:
detecting a communication server with a queuing system.
99. (Currently Amended) The method of claim 5, further comprising:
instantiating a task thread to detect incoming events from the first or second
communication channel.
100. (Currently Amended) The method of claim 5, further comprising:
detecting an incoming event from the first or second communication channel; and
invoking a function to handle the event.
101. (Previously Presented) The method of claim 100, further comprising:
queuing the event to a memory cache.
102. (Previously Presented) The method of claim 101, further comprising:
indicating the arrival of the event.
103. (Previously Presented) The method of claim 102, further comprising:
dequeuing the event out of the memory cache and processing the event.
104. (New) A method comprising:
a channel driver receiving a first request from a first device via a first channel that
operates according to a first media type;
the channel driver receiving a second request from a second device via a second channel
that operates according to a second media type, wherein the first and second
media types are different from each other;
the channel driver generating a first command in response to receiving the first request;
the channel driver generating a second command in response to receiving the second
request, wherein the first and second commands are identical to each other.

105. (New) The method of claim 104 further comprising:
assigning the first command to a first agent associated with a first device;
assigning the second command to a second agent associated with a second device;
the first device generating a first reply command in response to the assignment of the first
command to the first agent;
the second device generating a second reply command in response to the assignment of
the second command to the second agent;
a first channel driver of the channel generating and transmitting a first signal to the first
device via the first channel in response to the first device generating the first reply
command;
a second channel driver of the channel generating and transmitting a second signal to the
second device via the second channel in response to the second device generating
the second reply command.